WE CLAIM AS OUR INVENTION

PATENT CLAIMS

5

10

15

20

Broadband communication system comprising a plurality of cordless communication devices (1) connected to one another for cordless communication with at least one communication terminal (2) within a communication cell, whereby the cordless communication devices (1) are connectible to a power supply network and are fashioned for broadband data transmission via the power supply network (4).

6

- 2. Communication system according to claim 1, characterized in that the cordless communication devices (1) are fashioned for cordless data transmission via radio.
- 3. Communication system according to claim, characterized in that the cordless communication devices (1) are fashioned for cordless data transmission via infrared radiation.
- 4. Communication system according to claim 3, characterized in that the data transmission between cordless communication device (1) and communication terminal (2) ensues with amplitude modulation of the infrared base band.
- 5. Communication system according to claim 3, characterized in that the data transmission between cordless communication device (1) and communication terminal (2) ensues by higher-grade, digital modulation.
- 6. Communication system according to one of the claims 3 through 5, characterized in that the infrared radiation has a wavelength from 800 nm through 100 nm.
- Communication system according to one of the claims 3 through 5, characterized in that the infrared radiation has a wavelength from 1200 nm through 1400 nm.

20

8. Communication system according to one of the claims 3 through 7, characterized in that the infrared source is a surface-emitting semiconductor laser (VCSEL).

- 9. Communication system according to one of the claims 1 through 8, characterized by a control means (5) for controlling the data communication between the cordless communication devices (1).
 - 10. Communication system according to claim 9, characterized in that the control means (5) produces a connection to an external communication network.
- 11. Communication system according to claim 10, characterized in that the connection to the external communication network is produced with coaxial cable or optical fiber cable.
 - 12. Communication system according to claim 10, characterized in that the connection to the external communication network ensues via a radio connection.
- 13. Communication system according to one of the claims 1 through 12, characterized in that the cordless communication devices (1) are fashioned for data transmission via a 230 volt or a 110 volt power supply network.
 - 14. Communication system according to one of the claims 1 through 13 characterized in that a communication cell is formed by a room in a building.
 - 15. Communication system according to one of the claims 1 through 14 characterized in that the cordless communication devices (1) can be screwed into an ineandescent bulb socket.

16. Communication system according Oclaim 15, characterized in that a cordless communication device comprises its own incardescent bulb sockets

add 7